

AMENDMENT AND CLAIMS LISTING

Please amend the claims as follow:

Claim 1 (presently amended) 1. A dental curing light comprising:

 a wand adapted to be grasped by a human hand,

 a wall outlet power adapter for converting AC power to DC power usable by the dental curing light,

 electronic control circuitry for controlling operation of the curing light located within said power adapter,

 a light module,

 said light module including an elongate heat sink with a proximal end and a distal end, said proximal end being proximate said wand, said elongate heat sink having a longitudinal axis,

 a mounting platform located at said elongate heat sink distal end, said mounting platform being adapted to have a light emitting semiconductor device mounted thereon, and

 a light emitting semiconductor device mounted on said mounting platform by use of heat conductive and light reflective adhesive;

wherein said mounting platform is oriented so that when a light emitting semiconductor device is mounted on it, light emitted by the light emitting semiconductor device will be emitted at an angle of from about 30 degrees to about 150 degrees to said elongate heat sink longitudinal axis.

Claim 2 (original) 2. A dental curing light as recited in claim 1 wherein said light emitting semiconductor device is selected from the group consisting of light emitting diode chips, laser chips, light emitting diode chip array, diode laser chips, diode laser chip array, surface emitting laser chips, edge emitting laser chips, and VCSEL chips.

Claim 3 (original) 3. A dental curing light as recited in claim 1 wherein said light emitting semiconductor device utilizes a driving current of not more than about 350 milliamps.

Claim 4 (original) 4. A dental curing light as recited in claim 1 further comprising at least one air vent on said wand.

Claim 5 (original) 5. A dental curing light as recited in claim 1 wherein said mounting platform is oriented so that when a light emitting semiconductor device is mounted on it, light emitted by the light emitting semiconductor device will be emitted generally orthogonal to said elongate heat sink longitudinal axis.

Claim 6 (canceled)

Claim 7 (presently amended) 7. A dental curing light comprising:
a wand adapted to be grasped by a human hand,
~~a wall outlet power adapter for converting AC power to DC power usable by the dental curing light,~~
electronic control circuitry located within said wand power adapter,
a light module,
said light module including an elongate heat sink with a proximal end and a distal end, said proximal end being proximate said wand, said elongate heat sink having a longitudinal axis, and elongate heat sink being adapted to draw heat away from a semiconductor located at said elongate heat sink distal end,
a mounting platform located at said elongate heat sink distal end,
a primary heat sink mounted to said mounting platform, and
a light emitting semiconductor device affixed to said primary heat sink;
wherein said mounting platform is oriented so that when a light emitting semiconductor device is mounted on it, light emitted by the light emitting semiconductor device will be emitted at an angle of from about 30 degrees to about 150 degrees to said elongate heat sink longitudinal axis.

Claim 8 (original) 8. A dental curing light as recited in claim 7 wherein said light emitting semiconductor device is selected from the group consisting of light emitting diode

chips, laser chips, light emitting diode chip array, diode laser chips, diode laser chip array, surface emitting laser chips, edge emitting laser chips, and VCSEL chips.

Claim 9 (original) 9. A dental curing light as recited in claim 7 further comprising at least one air vent on said wand.

Claim 10 (original) 10. A dental curing light as recited in claim 7 wherein said mounting platform is oriented so that when a light emitting semiconductor device is mounted on it, light emitted by the light emitting semiconductor device will be emitted generally orthogonal to said elongate heat sink longitudinal axis.

Claim 11 (cancelled)

Claim 12 (original) 12. A dental curing light as recited in claim 7 further comprising a well in said primary heat sink, said light emitting semiconductor device being located in said well.

Claim 13 (original) 13. A dental curing light as recited in claim 12 wherein said well includes a light reflective coating on its interior.

Claim 14 (original) 14. A dental curing light as recited in claim 12 wherein said light emitting semiconductor device is affixed to said primary heat sink by use of heat conductive and light reflective adhesive.

Claim 15 (original) 15. A dental curing light as recited in claim 12 further comprising a cover over said light emitting semiconductor device.

Claim 16 (original) 16. A dental curing light as recited in claim 16 wherein said cover is selected from the group consisting of windows and focus lenses.

Claim 17 (presently amended) 17. A dental curing light comprising:

a wand designed to be grasped by a human hand,

controls for initiating and terminating light transmission by the dental curing light,

circuitry in electrical connection with said controls,

a light source, the light source including:

 a light emitting semiconductor device,

 a primary heat sink to which said light emitting semiconductor device is affixed,

 an elongate secondary heat sink to which said primary heat sink is affixed,

 a mounting platform located at said secondary heat sink distal end, said primary heat sink being affixed to said mounting platform,

 said primary heat sink being adapted to draw heat away from said light emitting semiconductor device,

 said elongate secondary heat sink being adapted to draw heat away from said primary heat sink and to dissipate said heat;

wherein said elongate secondary heat sink has a longitudinal axis, and

wherein at least some of the light emitted by said light source travels in a direction that is not parallel to said elongate heat sink longitudinal axis.

Claim 18 (cancelled)

Claim 19 (cancelled)

Claim 20 (cancelled)